



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit :
Examiner :
Serial No. : 10/657,461
Filed : September 8, 2003
Inventor : DeLuca, Michael R.
Title : PROGRAMMABLE THERMOSTAT
: INCORPORATING AIR QUALITY
: PROTECTION

Customer No. 035811

Docket No.: 1117-R-03

Confirmation No.: 8074

Dated: November 13, 2003

Mail Stop Petition

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Certificate of Mailing Under 37 CFR 1.8

For

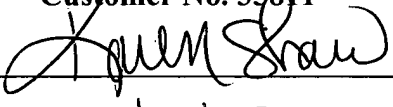
Postcard

Check in the Amount of \$130.00
Transmittal Letter, in duplicate
Petition to Make Special
Form PTO-1449 w/ 4 References

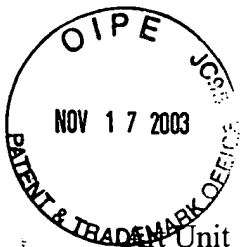
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date appearing below.

Name of Applicant, Assignee, Applicant's Attorney
or Registered Representative:

Piper Rudnick LLP
Customer No. 35811

By: 

Date: 11/13/03



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TRANSMITTAL LETTER

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Sir:

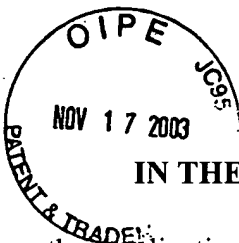
We submit herewith the Petition to Make Special, together with Form PTO-1449 and four (4) references. We request the usual confirmation that the Petition has been filed and approved.

Also enclosed please find our check in the amount of \$130.00 for the requisite fee and postcard for filing in the above-identified Petition. The Commissioner is hereby authorized to charge any additional fee or credit any overpayment associated with the filing of the Petition to Deposit Account No. 50-2719. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Frank A. Cona
Reg. No. 38,412

FAC:ks
(215) 656-3300



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: : Group Art Unit: Not Yet Assigned
Michael R. DeLuca : Examiner: Not Yet Assigned
:
Filed: September 8, 2003 : Atty. Docket No.: 1117-R-03
:
Entitled: PROGRAMMABLE THERMOSTAT :
INCORPORATING AIR QUALITY :
PROTECTION :
:
Date: November 13, 2003

PETITION TO MAKE SPECIAL
UNDER 37 C.F.R. § 1.102(d)

Mail Stop Petition

Commissioner for Patents
P.O. Box 1450
Washington, D.C. 20231-1450

11/19/2003 MROCHA1 00000006 10657461

01 FC:1460

130.00 OP

Sir:

Applicant hereby petitions under 37 CFR § 1.102(d) and MPEP 708.02(VIII) that the subject application be accorded special status and advanced in order of examination.

The requirements of 37 C.F.R. § 1.102 and MPEP § 708.02 are fulfilled as follows:

1. A check for the appropriate fee (\$130.00) as set forth in 37 C.F.R. § 1.17(h) is attached hereto.
2. The patent application presents Claims 1-72 drawn to a single invention. In the event that restriction is required, an election will be made without traverse.
3. A pre-examination search was made. The class searched was 236. An Information Disclosure Statement (IDS) is filed concurrently herewith. The listed publications, copies enclosed, represent the results of the search.
4. A copy of each of the cited publications is enclosed for the record.
5. A detailed discussion of the publications follows, pointing out, with particularity as set forth in 37 C.F.R. §§ 1.111(b) and (c), that the claimed subject matter is patentable over the cited publications.

Applicant respectfully submits that all requirements called for by the applicable rules have been fulfilled. Applicant respectfully requests early favorable action on this Petition.

DETAILED DESCRIPTION OF THE CITED ART

This detailed description of the related art is submitted as part of the Petition to Make Special pursuant to 37 C.F.R. § 1.102 and MPEP § 708.02. The following publications were uncovered during the pre-examination search and are discussed below:

No.	Patent No.	Inventor	Date Issued	Title
<i>U.S. Patents</i>				
1.	5,718,372	Tishler	02/17/98	Temperature controller
2.	5,676,196	Jakubzick, et al.	10/14/97	Dual energy saver for air conditioning
3.	5,289,362	Liebl, et al.	02/22/94	Energy control system
4.	5,107,918	McFarlane, et al.	04/28/92	Electronic thermostat
5.				
6.				
7.				
8.				
9.				
<i>U.S. Published Patent Applications</i>			Publ. Date	
1.				
<i>Other Documents</i>				
1.				
2.				
3.				

1. U.S. Patent No. 5,718,372 to Tishler

This patent discloses a supplementary thermal system controller for assisting a main system controller in retaining a desired temperature rise by monitoring the temperature in the return duct, wherein the supplemental controller comprises a microcontroller for reading and processing return duct temperature measurements, a signal conditioner circuit for preparing temperature related signals for processing by the microcontroller, processor readable medium of program code for determining the rate of temperature change in the return duct and providing control signals based on the rate of temperature change, and a supplemental thermal source driver for controlling a supplemental thermal source, such as electrical resistance heating elements, to cause the assisting temperature source to increase or decrease its thermal output.

2. U.S. Patent No. 5,676,196 to Jakubzick, et al.

This patent discloses an attachment unit to an existing central air conditioning thermostat controller like the ones found in most homes and offices; which provides two independent modes of saving energy, first by turning on a light to indicate when to change the filter and secondly by extending the fan operation for a few minutes without disruption. The attachment unit is smaller than the typical thermostat controller, automatic, maintenance free, no batteries or auxiliary power of any kind, and has one button to reset the light after changing the filter and one switch to select the optional extended fan operation.

3. U.S. Patent No. 5,289,362 to Liebl, et al.

This patent discloses a climate control system using real time price tier data supplied by the utility company to achieve economical temperature regulation of the premise. The control system regulates temperature based on time of day data and desired temperature data supplied by the user wherein the user may program different desired temperatures depending upon the relative cost of electricity. The system also provides billing information to the user for current usage and projected usage. The control system additionally controls appliance modules and regulates operation of the hot water heater.

4. U.S. Patent No. 5,107,918 to McFarlane, et al.

This patent discloses a temperature control system that employs a user friendly electronic thermostat that can be programmed intuitively and which is impossible to incorrectly program.

Further, the electronic thermostat needs no periodic maintenance checks because it employs a super capacitor to supply electrical energy to memory if power is temporarily lost. A large display means is responsive to the operator's programming as the programming is being performed, in addition to other times.

DESCRIPTION OF THE INVENTION

The invention is broadly directed to a digital or programmable thermostats for controlling a heating and/or cooling system to maintain predetermined set point temperatures, and more particularly to thermostats that incorporate air quality protection features. This may achieved in the invention by operating the air circulating system independently of the temperature control system over a programmed interval, by displaying air filter information that is calculated using air filter information inputted by the user, and by using a sensor that detected at least one characteristic of the air filter and used to generate the displayed air filter information.

ANALYSIS OF THE CITED ART

Claims 52, 59, 67, 71, 72, and 73 are representative of aspects of the invention. These claims are reproduced below for the Examiner's convenience.

Claim 52 recites:

"52. A temperature control apparatus for the control of temperature in communication with a temperature-modifying device and an air circulating system, said temperature control apparatus comprising:

a controller to control a thermal output of said temperature-modifying device to achieve a desired temperature, and to operate said air circulating system independently of said temperature-modifying device."

Claim 59 recites:

"59. A temperature control apparatus for the control of temperature in communication with a temperature-modifying device and an air circulating system, said temperature control apparatus comprising:

a user-operable input connected for entering air filter information;

an electronic controller to control a thermal output of said temperature-modifying device to achieve a desired temperature, and to generate air filter output information based upon said air filter information inputted at said user-operable input; and

a display for displaying said air filter output information during said control of said thermal output of said temperature-modifying device."

Claim 67 recites:

"67. A temperature control apparatus for the control of temperature in communication with a temperature-modifying device and an air circulating system, said temperature control apparatus comprising:

a user-operable input connected for entering air filter information;

an electronic controller to control a thermal output of said temperature-modifying device to achieve a desired temperature, and to generate air filter output information based upon said air filter information inputted at said user-operable input;

a display for displaying said air filter output information during said control of said thermal output of said temperature-modifying device; and

at least one sensor for sensing at least one characteristic of said air circulating system and communicating characteristic information based thereon to said controller to be used in generating said air filtration output information."

Claim 71 recites:

"71. A method of operating an air circulating system in communication with a temperature control system, said method comprising the step of using a controller to control a thermal output of a temperature-modifying device to achieve a desired temperature to independently operate said air circulating system under programmed operation. "

Claim 72 recites:

"72. A method of monitoring an air filter used in a temperature control system, said method comprising the steps of:

entering air filter information to a controller to control a thermal output of a temperature-modifying device to achieve a desired temperature;

generating air filtration output information using said air filter information; and

displaying said air filtration output information on a display during said control of said thermal output of said temperature-modifying device. "

Claim 73 recites:

**"73. A method of monitoring an air filter used in a temperature control system, said method comprising the steps of:
entering air filter information to a controller to control a thermal output of a temperature-modifying device to achieve a desired temperature;
receiving characteristic information regarding at least one characteristic of said air circulating system;
generating air filtration output information using said air filter information and said characteristic information; and
displaying said air filtration output information on a display during said control of said thermal output of said temperature-modifying device. "**

None of the related art known or discovered by the Applicant discloses, teaches or suggests this apparatus or methodology.

U.S. Patent No. 5,718,372 to Tishler discloses a supplementary thermal system controller for assisting a main system controller by monitoring the temperature in the return duct. The '372 Patent nowhere teaches or suggest the claimed invention, in which the temperature controller may operating the air circulating system independently of the temperature control system, or displaying air filter information that is generated using air filter information inputted by the user, or use a sensor that detected at least one characteristic of the air filter and used to generate the displayed air filter information.

U.S. Patent No. 5,676,196 to Jakubzick, et al. discloses an attachment unit to an existing thermostat turns on a light to indicate when to change the filter and extends the fan operation for a few minutes without disruption. The '196 Patent nowhere teaches or suggest the claimed invention, in which the temperature controller may operating the air circulating system independently of the temperature control system, or displaying air filter information that is generated using air filter information inputted by the user, or use a sensor that detected at least one characteristic of the air filter and used to generate the displayed air filter information.

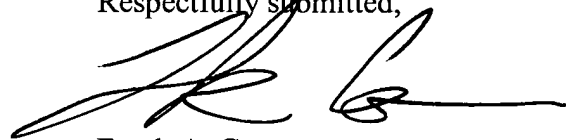
U.S. Patent No. 5,289,362 to Liebl, et al. discloses a climate control system that uses real time price tier data, time of day data, and desired temperature data to control temperature. The '362 Patent nowhere teaches or suggest the claimed invention, in which the temperature controller may operating the air circulating system independently of the temperature control system, or displaying air filter information that is generated using air filter information inputted

by the user, or use a sensor that detected at least one characteristic of the air filter and used to generate the displayed air filter information.

U.S. Patent No. 5,107,918 to McFarlane, et al. discloses a temperature control system that employs a user friendly electronic thermostat. The '918 Patent nowhere teaches or suggests the claimed invention, in which the temperature controller may operating the air circulating system independently of the temperature control system, or displaying air filter information that is generated using air filter information inputted by the user, or use a sensor that detected at least one characteristic of the air filter and used to generate the displayed air filter information.

Accordingly, Applicant respectfully requests that the Petition to Make Special be granted, and that the application be taken out of turn for examination. Applicant also respectfully requests an early consideration and allowance of the solicited claims.

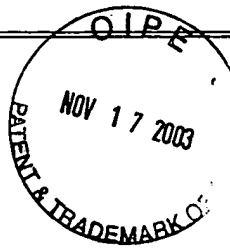
Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Frank A. Cona', written over a horizontal line.

Frank A. Cona
Reg. No. 38,412

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(215) 656-3300

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE



ATTY. DOCKET NO.
1117-R-03

SERIAL NO.
10/657,461

APPLICANT Michael R. DeLuca

FILING DATE
9/8/03

GROUP

LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,718,372	2/17/98	Tishler			
	AB	5,676,196	10/14/97	Jakubzick et al.			
	AC	5,289,362	2/22/94	Liebel et al.			
	AD	5,107,918	4/28/92	McFarlane et al.			
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	
	AS	
	AT	

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to Applicant.